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**REMARKS**

In view of the following discussion, the Applicant submits that none of the claims now pending in the application are non-enabling, anticipated, or obvious under the respective provisions of 35 U.S.C. § 112, §102, and §103. Thus, the Applicant believes that all of these claims are now in allowable form.

It is to be understood that the Applicant, does not acquiesce to the Examiner's characterizations of the art of record or to Applicant's subject matter recited in the pending claims. Further, Applicant is not acquiescing to the Examiner's statements as to the applicability of the prior art of record to the pending claims by filing this Response.

**Rejections**

**Rejections of claims under 35 U.S.C. § 102**

Claims 1 - 28 are rejected under 35 U.S.C. §102(a) as being anticipated by the Publication entitled "Scalable Atomic Multicast" (hereinafter "SAM-article") authored by Rodrigues, Guerraoui and Schiper. Specifically, the Examiner alleges that SAM-article discloses a method for multicasting data messages to members of the multicast group which includes all the steps of independent claims 1, 7 and 23. The specific details and nature of the rejections can be found at pages 3 – 20 of the Examiner's May 13, 2004 Final Office Action and are not repeated here for sake of brevity.

In response, the rejection is respectfully traversed. Applicant would like to thank Examiner George Neurauter for providing the Applicant with the opportunity to discuss the merits of the case during the July 5, 2004 telephone interview as the Applicant is aware of the time constraints placed on the Examiner for processing the subject application. This response provides clarifying arguments with respect to as of yet unresolved prosecution issues. Applicant offers that while SAM-article is in the technical field of the subject invention, there are deficiencies in the exact teachings of the reference or the Examiner's interpretation of same that cannot support a finding of anticipation. Case law cited on applicant's prior response is still of record.

Specifically, the relevant portion of each of the independent claim 1, 7, 23 are shown to more clearly distinguish and identify that which Applicants consider the

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invention. It is respectfully submitted that SAM-article does not teach, disclose or suggest all the claimed features of the independent claims.

Claim 1 (excerpt):

assigning the first sequence number to the first data message, in response to the sequencer receiving a first quantity of the requests to assign a first sequence number to the first data message said first quantity of requests being other than a majority of requests from the data servers;

Claim 7 (excerpt):

assigning a sequence number following all sequence numbers assigned prior to assignment of the sequence number to said each data message, in response to the sequencer receiving a first quantity of requests to assign a sequence number to said each data message said first quantity of requests being other than a majority of requests from the data servers;

Claim 23 (excerpt)

assigning the sequence number to the data message in response to a non-majority number of requests from the data servers;

Support for the recitation of these claim elements is found at Page 17 of the written specification. Specifically, at lines 1-3, "(T)he sequencer assigns sequence numbers only to messages that have been reported by at least k different servers." At lines 15-16, "...the sequencer needs to wait for messages from only k servers each time, instead of waiting for messages from all group members as in Isis and Horus. The number of servers is generally very small compared to the number of clients." Finally at line 18, "(S)o k can be made very small." Therefore, and as indicated earlier in the prosecution history, the claimed invention is distinctly different from the cited art

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because majority reporting (or "majority of correct processes" as described in SAM-article) is not required.

In the May 13 Final Office Action, the Examiner attempted to interpret (for example) Claim 1 in a broad enough sense so as to have SAM-article read upon same. It is respectfully submitted that such interpretation (and specifically the Examiners offered example of SAM-article) is erroneous. In the July 5, telephone interview between the undersigned and the Examiner, details of this portion of the rejection were discussed. This Response confirms the content of that interview and elaborates on the arguments provided therein. Initially, the Examiner underlines the phrase "any subset of Dst(m)", but does not look at the entire definition of "qualified majority" as taught by the reference and apply same properly. The qualified majority is not just "any subset of Dst(m)", but "any subset of Dst(m) that contains a majority of processes of every group g<sub>i</sub> in Dst(m)." Clarification of this point is important because it reveals the difference between the reference teachings and the subject invention. Simply put, the reference teaches sequence number assignment based on a majority number of requests whereas the subject invention claims the exact opposite (e.g., other than a majority or a non-majority of requests to assign the sequence number).

In one example, the Examiner states that if there are 2 data servers or processes {p<sub>1</sub>, p<sub>2</sub>} in one group g<sub>1</sub>, then only 1 such process would need to send a request to assign a sequence number to fulfill the "qualified majority". It is respectfully submitted that this interpretation is incorrect because 1 process out of 2 {p<sub>1</sub> and p<sub>2</sub>} does not constitute a majority of g<sub>1</sub>. The reference teaches only a qualified majority of every group; 50% of the processes of a single group is not a majority. The example shown in the reference teaches that a qualified majority, of for example g<sub>1</sub>, would be p<sub>1</sub> and p<sub>2</sub> of the total processes p<sub>1</sub>,p<sub>2</sub> and p<sub>3</sub> (or 2 out of 3, not 1 out of 2). Accordingly, the Examiner's example cannot be used to support his position because the Examiner's example does not operate in accordance with the teachings of the reference. That is, a sequence number will not be assigned in the reference unless there is a "qualified majority" which is plainly not what the Examiner has shown or what the Applicant is claiming.

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In another example, the Examiner states only one of two groups {g1 and g2} need send the request to fulfill the "qualified majority", this interpretation is also incorrect because in this offering there is a counting of groups and not processes of the groups to show a teaching of a majority. The reference teaches only a qualified majority of every group; 50% of a set of groups is not a majority in the manner disclosed in the reference. Accordingly, it is respectfully submitted that in the two offered explanations, the intent and operation of the reference is insufficient to show anticipation of the subject invention.

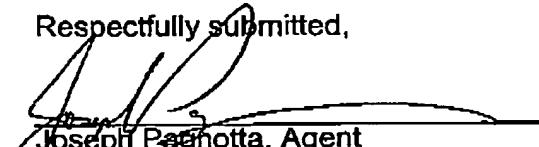
As such, the Applicants submit that claims 1, 7 and 23 are not anticipated and fully satisfy the requirements under 35 U.S.C. § 102 and are patentable thereunder. Furthermore, claims 2-6, 8-22 and 24-28 depend, either directly or indirectly, from independent claims 1, 7 and 23 and recite additional features thereof. As such, and for at least the same reasons discussed above, the Applicants submit that these dependent claims also fully satisfy the requirements under 35 U.S.C. § 102 and are patentable thereunder. Therefore, the Applicants respectfully request that the rejection be withdrawn.

#### Conclusion

The Applicants submit that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

  
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